DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter **Report No:** WIR-019718 Address: 333 Burma Road **Date Inspected:** 30-Jan-2011

City: Oakland, CA 94607

OSM Arrival Time: 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name: CWI Present: Yes Lv Li Qing No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes No N/A **Approved Drawings:** Yes No **Approved WPS:** Yes No N/A **Delayed / Cancelled:**

34-0006 **Bridge No: Component:** OBG

Summary of Items Observed:

On this day CALTRANS OSM Quality Assurance(QA) Inspector Mr. Shrikant Utekar was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China. The QA Inspector observed and/or found the following:

BAY # 14

ULTRASONIC TESTING

ZPMC NWIT No: 08307

This QA Inspector performed Ultrasonic Testing (UT) of approximately 10% of the length previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an (UT) report on this date. The members are identified as OBG 14 east. The weld designations are as follows:

SEG3019V-028, SEG3019Q-1-047, SEG3019Q-1-058

During the Ultrasonic testing of the weld SEG3019Q-1-058 this Quality Assurance (QA) Inspector discovered a class "A" non conforming indication measuring approximately 10mm in length, Material thickness is approximately 20mm. The depth of the indications was approximately 18. The indication db rating was +7. The weld is Complete Joint Penetration (CJP) "T" joint. Y locations of indications measured approximately 890mm. For indication detail see the "UT" report as same date. Incident report was not issued. As lead QA ZPMC will

WELDING INSPECTION REPORT

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repair this weld without issuing incident report and re-notified for the inspection.

OBG 14EAST

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 066422 performing the Shielded Metal Arc Welding process on weld 182 located at PCMK SEG3019E-1. ZPMC QC Mr. Guo Xing Hui was monitoring this welding operation. The welding variables recorded by QC appeared to comply with WPS-345-SMAW-2G (2F)-Fcm-Repair-1. Critical weld repair report identified as B-CWR2677.

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 0066418 performing the Shielded Metal Arc Welding process on weld 323 located at PCMK SEG3019D-1. ZPMC QC Mr. Guo Xing Hui was monitoring this welding operation. The welding variables recorded by QC appeared to comply with WPS-345-SMAW-2G (2F)-Fcm-Repair-1. Critical weld repair report identified as B-CWR2678.

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 044772 performing the Shielded Metal Arc Welding process on weld 085 located at PCMK SEG3019L-1. ZPMC QC Mr. Guo Xing Hui was monitoring this welding operation. The welding variables recorded by QC appeared to comply with WPS-345-SMAW-3G (3F)-Fcm-Repair-1. Critical weld repair report identified as B-CWR2645.

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 066763 performing the Flux Cored Arc Welding process on weld 047 located at PCMK SEG3019BB. ZPMC QC Mr. Xie Ming Feng was monitoring this welding operation. The welding variables recorded by QC appeared to comply with WPS-B-T-2233-ESAB.

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 067877 performing the Flux Cored Arc Welding process on weld 069 located at PCMK SEG3019BB. ZPMC QC Mr. Xie Ming Feng was monitoring this welding operation. The welding variables recorded by QC appeared to comply with WPS-B-T-2233-ESAB.

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 067079 performing the Flux Cored Arc Welding process on weld 009 located at PCMK SEG3019BB. ZPMC QC Mr. Xie Ming Feng was monitoring this welding operation. The welding variables recorded by QC appeared to comply with WPS-B-T-2233-ESAB.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

Summary of Conversations:

No significant conversations were reported on this date.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang, +(86) 1500 042 2372, who represents the Office of Structural Materials for your project.

Inspected By:	Utekar,Shrikant	Quality Assurance Inspector
Reviewed By:	Patterson, Rodney	QA Reviewer